



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R05-OAR-2014-0664; FRL-9943-33-Region 5]

**Air Plan Approval; Illinois; Base Year Emission Inventories for
the 2008 8-Hour Ozone Standard**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: The Environmental Protection Agency (EPA) is approving a State Implementation Plan (SIP) revision submitted by the Illinois Environmental Protection Agency (IEPA) on September 3, 2014, to address emission inventory requirements for the Illinois portions of the Chicago-Naperville, Illinois-Indiana-Wisconsin (IL-IN-WI) and St. Louis, Missouri-Illinois (MO-IL) ozone nonattainment areas under the 2008 ozone National Ambient Air Quality Standard (NAAQS or standard). The Clean Air Act (CAA) requires emission inventories for all ozone nonattainment areas. The emission inventories contained in Illinois' September 3, 2014, submission meet this CAA requirement.

DATES: This direct final rule will be effective **[insert date 60 days after publication in the Federal Register]**, unless EPA receives adverse comments by **[insert date 30 days after publication in the Federal Register]**. If adverse comments are received by EPA, EPA will publish a timely withdrawal of the

direct final rule in the Federal Register informing the public that the rule will not take effect.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R05-OAR-2014-0664 at <http://www.regulations.gov> or via email to Aburano.Douglas@epa.gov. For comments submitted at [Regulations.gov](http://www.Regulations.gov), follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from [Regulations.gov](http://www.Regulations.gov). For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the "For Further Information Contact" section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: Edward Doty, Attainment Planning and Maintenance Section, Air Programs Branch (AR-18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 886-6057, Doty.Edward@epa.gov.

SUPPLEMENTARY INFORMATION:

Throughout this document, whenever "we," "us," or "our" is used, we mean EPA. This supplementary information section is arranged as follows:

I. The 2008 Ozone NAAQS and Emission Inventory Requirements

II. Illinois' Emission Inventories

A. Base Year

B. How Did the State Develop the Emission Inventories?

III. EPA's Evaluation

A. Did the State Adequately Document the Derivation of the Emission Estimates?

B. Did the State Quality Assure the Emission Estimates?

C. Did the State Provide for Public Review of the Requested SIP Revision?

IV. Final Action

V. Statutory and Executive Order Reviews

I. The 2008 Ozone NAAQS and Emission Inventory Requirements

On March 12, 2008, EPA promulgated a revised 8-hour ozone NAAQS of 0.075 parts per million (ppm). See 73 FR 16436 (March

27, 2008). In 2012, EPA designated nonattainment areas for the 2008 ozone NAAQS (77 FR 30088, May 21, 2012, and 77 FR 34221, June 11, 2012). The Chicago-Naperville, IL-IN-WI and St. Louis, MO-IL areas were designated as marginal nonattainment areas for the 2008 ozone NAAQS. The Illinois portion (the Chicago area) of the Chicago-Naperville, IL-IN-WI ozone nonattainment area includes the counties of Cook, DuPage, Kane, Lake, McHenry, and Will, Aux Sable and Goose Lake Townships in Grundy County, and Oswego Township in Kendall County. The Illinois portion (the Metro-East St. Louis area) of the St. Louis, MO-IL ozone nonattainment area includes Madison, Monroe, and St. Clair Counties.

CAA sections 172(c)(3) and 182(a)(1), 42 U.S.C. 7502(c)(3) and 7511a(a)(1), require states to develop and submit, as SIP revisions, emission inventories for all areas designated as nonattainment for the ozone NAAQS. An emission inventory for ozone is an estimation of actual emissions of air pollutants that contribute to the formation of ozone in an area. Ozone is a gas that is formed by the reaction of Volatile Organic Compounds (VOC) and Oxides of Nitrogen (NO_x) in the atmosphere in the presence of sunlight (VOC and NO_x are referred to as ozone precursors). Therefore, an emission inventory for ozone covers the emissions of VOC and NO_x. VOC is emitted by many types of pollution sources, including power plants, industrial

sources, on-road and off-road mobile sources, smaller stationary sources, collectively referred to as area sources, and biogenic sources¹. NO_x is primarily emitted by combustion sources, both stationary and mobile.

The emission inventories provide emissions data for a variety of air quality planning tasks, including establishing baseline emission levels, calculating emission reduction targets needed to attain the NAAQS, determining emission inputs for ozone air quality modeling analyses, and tracking emissions over time to determine progress toward achieving air quality and emission reduction goals. As stated above, the CAA requires the states to submit emission inventories for areas designated as nonattainment for ozone. For the 2008 ozone NAAQS, EPA has recommended that states use 2011 as a base year for the emission estimates (78 FR 34178, 34190, June 6, 2013). However, EPA also allows states to submit base year emissions for other years during a recent ozone standard violation period. States are required to submit estimates of VOC and NO_x emissions for four general classes of anthropogenic sources: stationary point sources; area sources; on-road mobile sources; and off-road mobile sources in their emission inventories.

II. Illinois' Emission Inventories

¹ Biogenic emissions are produced by living organisms and are typically not included in the base year emission inventories, but are considered in ozone modeling analyses, which must consider all emissions in a modeled area.

Illinois submitted a SIP revision addressing the VOC and NOx emission inventory requirement for the Chicago and Metro-East St. Louis areas on September 3, 2014. Tables 1 and 2 summarize the 2011 VOC and NOx emissions for these two areas for a typical summer day (reflective of the summer period, when the highest ozone concentrations are expected in these ozone nonattainment areas).

**Table 1. Chicago Area 2011 Emission Inventory
(tons per day)**

Source Type	VOC	NOx
Point	48.26	119.88
Area	210.04	27.13
On-Road Mobile	91.03	296.38
Off-Road Mobile	168.66	170.86
Totals	517.98	614.37

**Table 2. Metro-East St. Louis Area 2011 Emission Inventory
(tons per day)**

Source Type	VOC	NOx
Point	10.80	26.18
Area	18.12	1.24
On-Road Mobile	11.44	34.14
Off-Road Mobile	8.49	17.17
Totals	48.86	78.72

A. Base Year

As recommended by the EPA, the IEPA has selected 2011 as the base year for the submitted emission inventories.

B. How Did the State Develop the Emission Inventories?

Illinois estimated VOC (Volatile Organic Material (VOM) in the Illinois emission inventory²) and NO_x emissions for each Illinois county contained in (and for each township for counties partially contained in) the Chicago and Metro-East St. Louis areas. Emissions for the counties (or townships) were totaled by source category for the two ozone nonattainment areas. To develop the VOC and NO_x emission inventories, IEPA used the procedures summarized below.

The primary source of emissions data for point sources was the source-reported 2011 Annual Emission Reports (AERs) (emission statements). Under Illinois state law covering emission statement requirements at 35 Illinois Administrative Code part 254, major sources are required to report emissions annually to the state. The emissions reported to the state for 2011 were the primary source of facility-emissions, which were further divided into source category-specific emission totals by county/township.

Area source emissions were generally calculated by multiplying source category-specific emission factors by 2011 source activity levels (population, employment levels, etc.) for each county or township. In some cases, 2011 area source

² VOM as defined at 35 Illinois Administrative Code section 211.7150 is identical to EPA's definition of VOC at 40 CFR 51.100(s). The terms VOC and VOM are interchangeable, and refer to the same compounds. We use VOC here to remain consistent with EPA's standard practice to refer to VOC as an ozone precursor.

category emissions were projected from 2010 emissions using estimated source category-specific growth rates.

On-road mobile source emissions were estimated using EPA's Motor Vehicle Emission Simulator model and vehicle activity levels provided by the state Department of Transportation and local planning agencies.

Off-road emissions were estimated using the National Mobile Inventory Model (NMIM). These emission estimates were supplemented with emission estimates for aircraft, locomotives, and commercial marine vessels provided through contractor studies since NMIM does not cover these source types.

III. EPA's Evaluation

EPA has reviewed Illinois' September 3, 2014, requested SIP revision for consistency with CAA and EPA emission inventory requirements. In particular, EPA has reviewed the techniques used by IEPA to derive and quality assure the emission estimates. EPA has also evaluated whether Illinois provided the public with the opportunity to review and comment on the development of the emission estimates and whether IEPA addressed public comments.

A. Did the State Adequately Document the Derivation of the Emission Estimates?

IEPA documented the general procedures used to estimate the emissions for each of the four major source types and for some

specific source types for the off-road emissions. The documentation of the emission estimation procedures was adequate for us to determine that Illinois followed acceptable procedures to estimate the emissions.

B. Did the State Quality Assure the Emission Estimates?

Illinois developed a quality assurance plan and followed this plan during various phases of the emissions estimation and documentation process to quality assure the emissions for completeness and accuracy. These quality assurance procedures are summarized in the documentation describing how the emissions totals were developed. We have determined that the quality assurance procedures followed by Illinois are adequate and acceptable and that Illinois has developed inventories of VOC and NO_x emissions that are comprehensive and complete.

C. Did the State Provide for Public Review of the Requested SIP Revision?

IEPA notified the public of the opportunity for comment both in newspapers and on IEPA's website. No comments were received on the emission inventories and no public hearing was requested.

IV. Final Action

We are approving the Illinois SIP revision submitted to address the emission inventory requirements for the Chicago and Metro-East St. Louis areas for the 2008 ozone NAAQS. The

emission inventories we are approving into the SIP are specified in Tables 1 and 2 above. We are approving the emission inventories because they contain comprehensive, accurate, and current inventories of actual emissions for all relevant sources in accordance with CAA sections 172(c)(3) and 182(a)(1) and because Illinois adopted the emission inventories after providing for reasonable public notice and the opportunity for public hearings.

We are publishing this action without prior proposal because we view this as a noncontroversial amendment and anticipate no adverse comments. However, in the proposed rules section of this Federal Register publication, we are publishing a separate document that will serve as the proposal to approve the state plan if relevant adverse written comments are filed. This rule will be effective **[insert date 60 days after the date of publication in the Federal Register]** without further notice unless we receive relevant adverse written comments by **[insert date 30 days after the date of publication in the Federal Register]**. If we receive such comments, we will withdraw this action before the effective date by publishing a subsequent document that will withdraw the final action. All public comments received will then be addressed in a subsequent final rule based on the proposed action. EPA will not institute a second comment period. Any parties interested in commenting on

this action should do so at this time. Please note that, if EPA receives adverse comment on an amendment, paragraph, or section of this rule and if that provision may be severed from the remainder of the rule, EPA may adopt as final those provisions of the rule that are not the subject of an adverse comment. If we do not receive any comments, this action will be effective **[insert date 60 days after the date of publication in the Federal Register]**.

V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501

et seq.);

- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **[insert date 60 days after date of publication in the Federal Register]**. Filing a

petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. Parties with objections to this direct final rule are encouraged to file a comment in response to the parallel notice of proposed rulemaking for this action published in the proposed rules section of today's Federal Register, rather than file an immediate petition for judicial review of this direct final rule, so that EPA can withdraw this direct final rule and address the comment in the proposed rulemaking. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2)).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: February 22, 2016.

Robert A. Kaplan,
Acting Regional Administrator, Region 5.

40 CFR part 52 is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

2. Section 52.726 is amended by adding paragraph (pp) to read as follows:

§52.726 Control strategy: Ozone.

* * * * *

(pp) On September 3, 2014, Illinois submitted 2011 volatile organic compounds and oxides of nitrogen emission inventories for the Illinois portions of the Chicago-Naperville, Illinois-Indiana-Wisconsin and St. Louis, Missouri-Illinois nonattainment areas for the 2008 ozone national ambient air quality standard as a revision of the Illinois state implementation plan. The emission inventories are approved as a revision of the state's implementation plan.